

Patent Abstracts of Japan

PUBLICATION NUMBER : 07045523
PUBLICATION DATE : 14-02-95

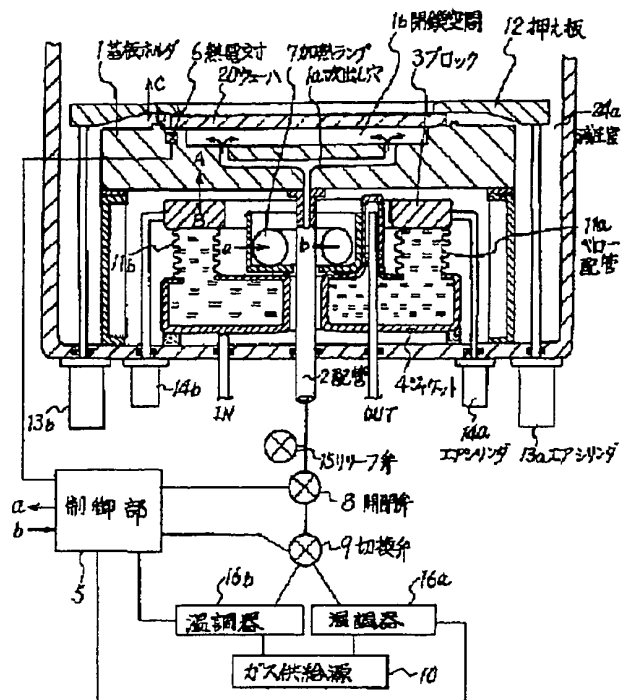
APPLICATION DATE : 27-07-93
APPLICATION NUMBER : 05184553

APPLICANT : NEC CORP;

INVENTOR : YASUMATSU MASAHIRO;

INT.CL. : H01L 21/203 H01L 21/205 H01L 21/31
H01L 21/68

TITLE : SEMICONDUCTOR SUBSTRATE
HEATING EQUIPMENT OF VACUUM
CHAMBER



ABSTRACT : PURPOSE: To enable the multistage temperature setting of a wafer and stably maintain the set temperature, in a wafer heating equipment in a vacuum chamber of a sputtering equipment, a low pressure CVD equipment, etc.

CONSTITUTION: A heating lamp 7 for obtaining a desired set temperature from the low temperature side, a cooling mechanism which brings a block 3 into contact with the rear of a substrate holder 1 and decreases a temperature to a set value from the high temperature side, and a high temperature side control equipment 16a and a low temperature side control equipment 16b which control the temperature of inert gas at a set value are installed, and the temperature of a wafer 20 is set to be a specified value by heating or cooling the substrate holder 1 which almost airtightly mounts a wafer 20, by turning on or off the heating lamp 7 or by contacting or separating the block 3 of the cooling mechanism. Further the temperature of the wafer is set to be a specified value, by filling a closed space formed by the wafer 20 and the substrate holder 1 with inert gas whose temperature is set to be a specified value by the temperature control equipments 16a, 16b.

COPYRIGHT: (C)1995,JPO